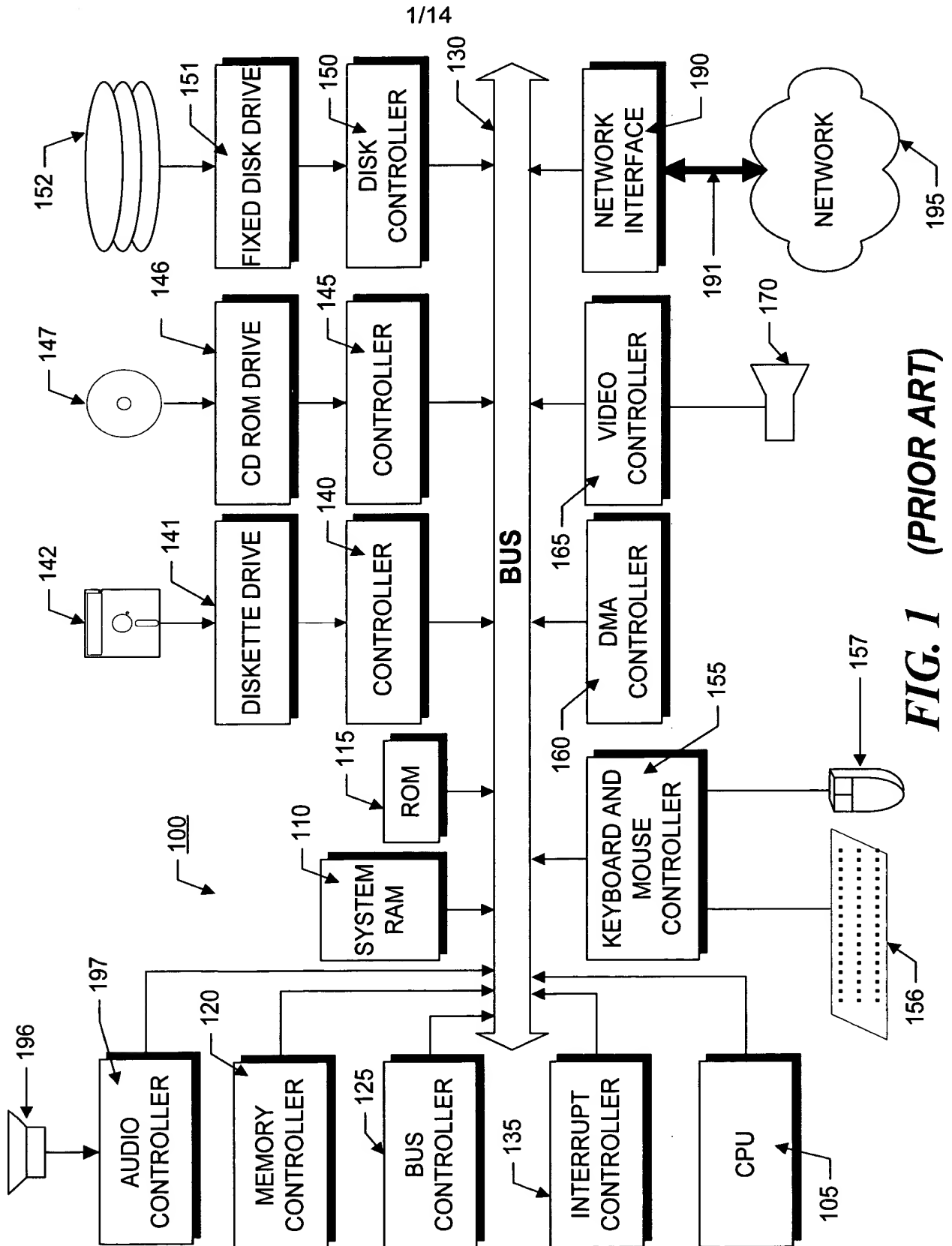


Title: METHOD AND APPARATUS FOR EFFICIENT MANAGEMENT OF XML ...  
Inventor: Raymond E. Ozzie, Kenneth G. Moore, Ransom L. Richardson and Edward J. Fischer  
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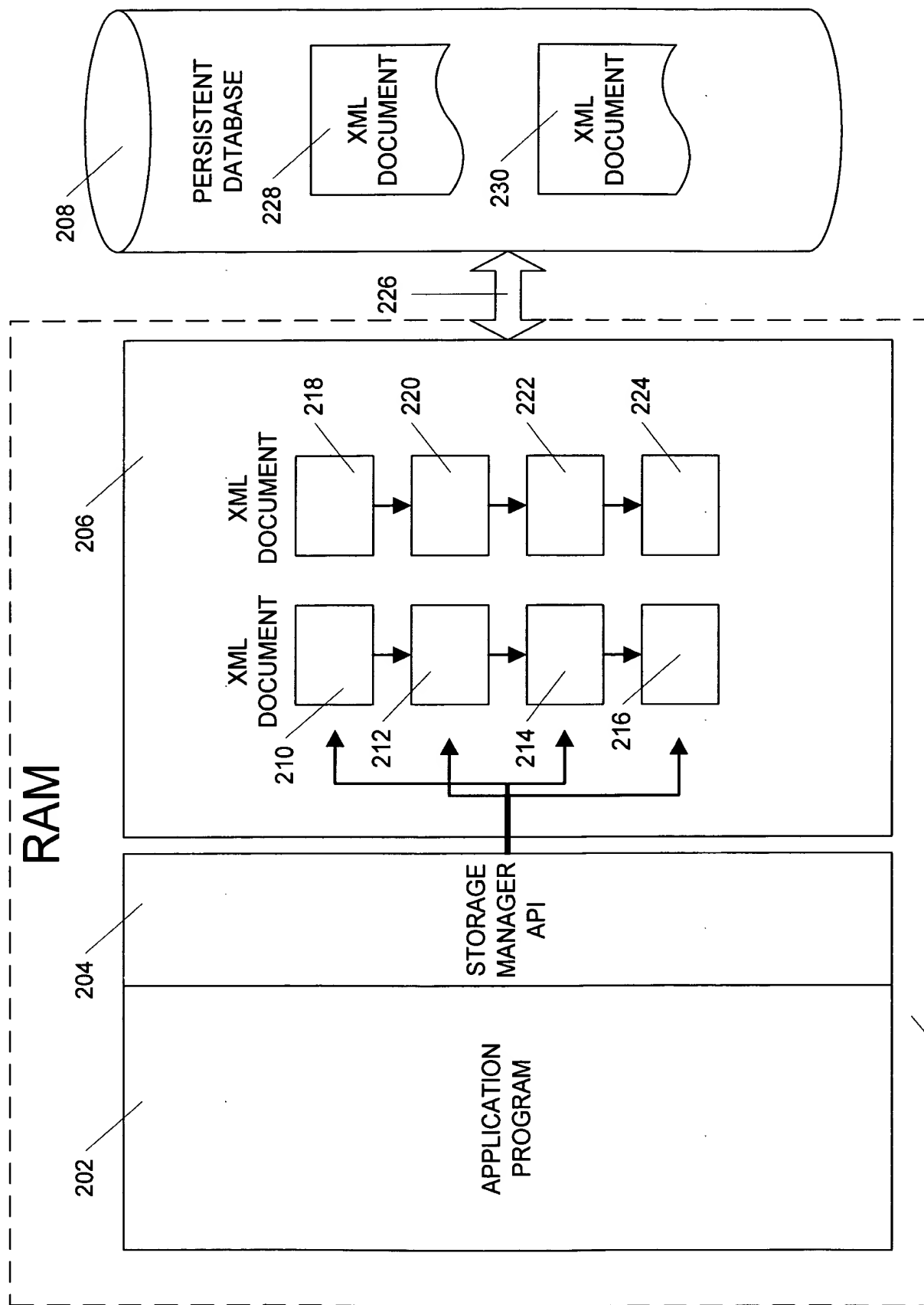
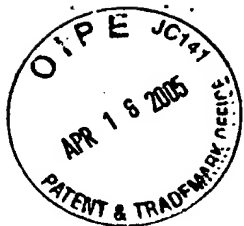


FIG. 2

200



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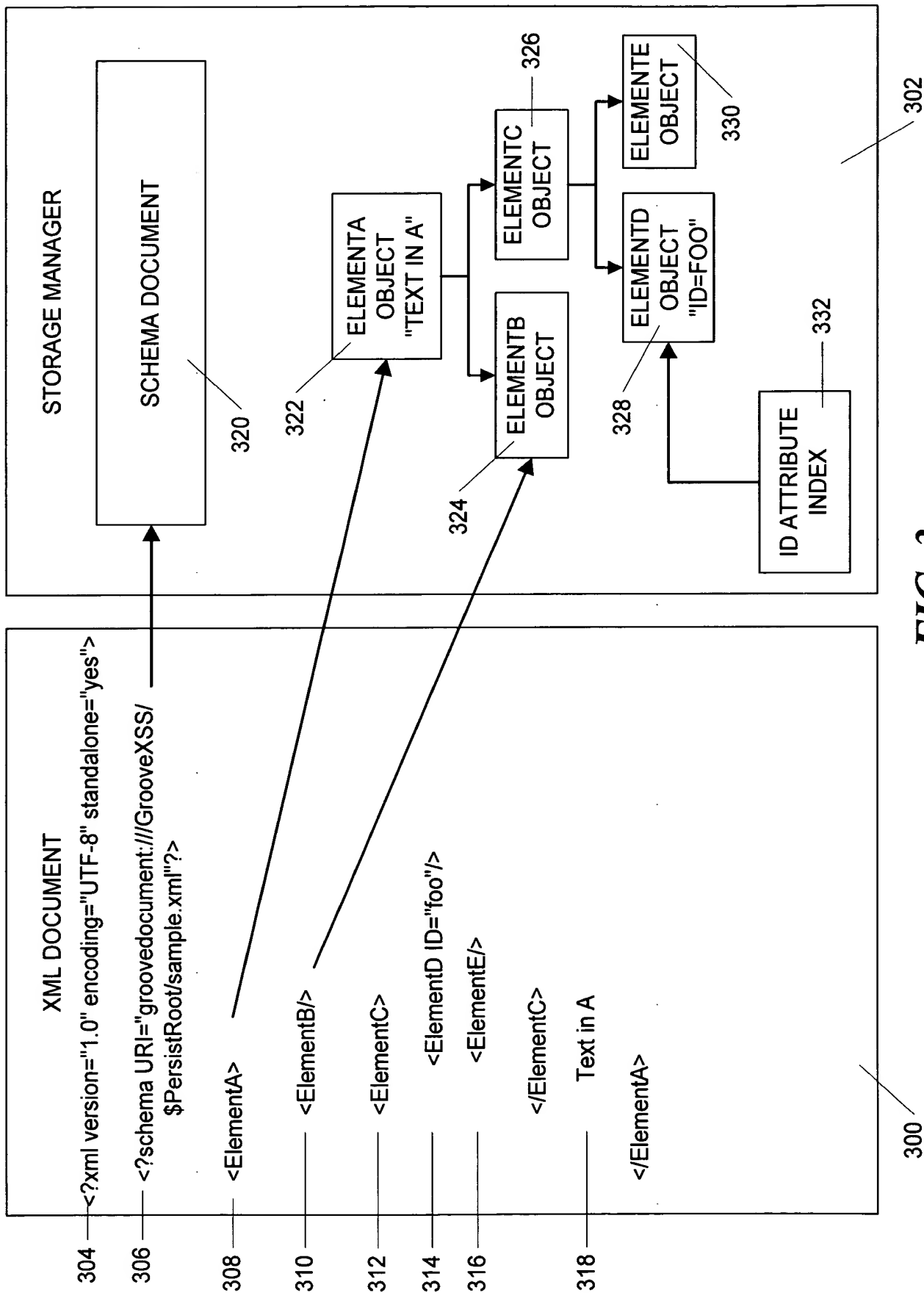


FIG. 3



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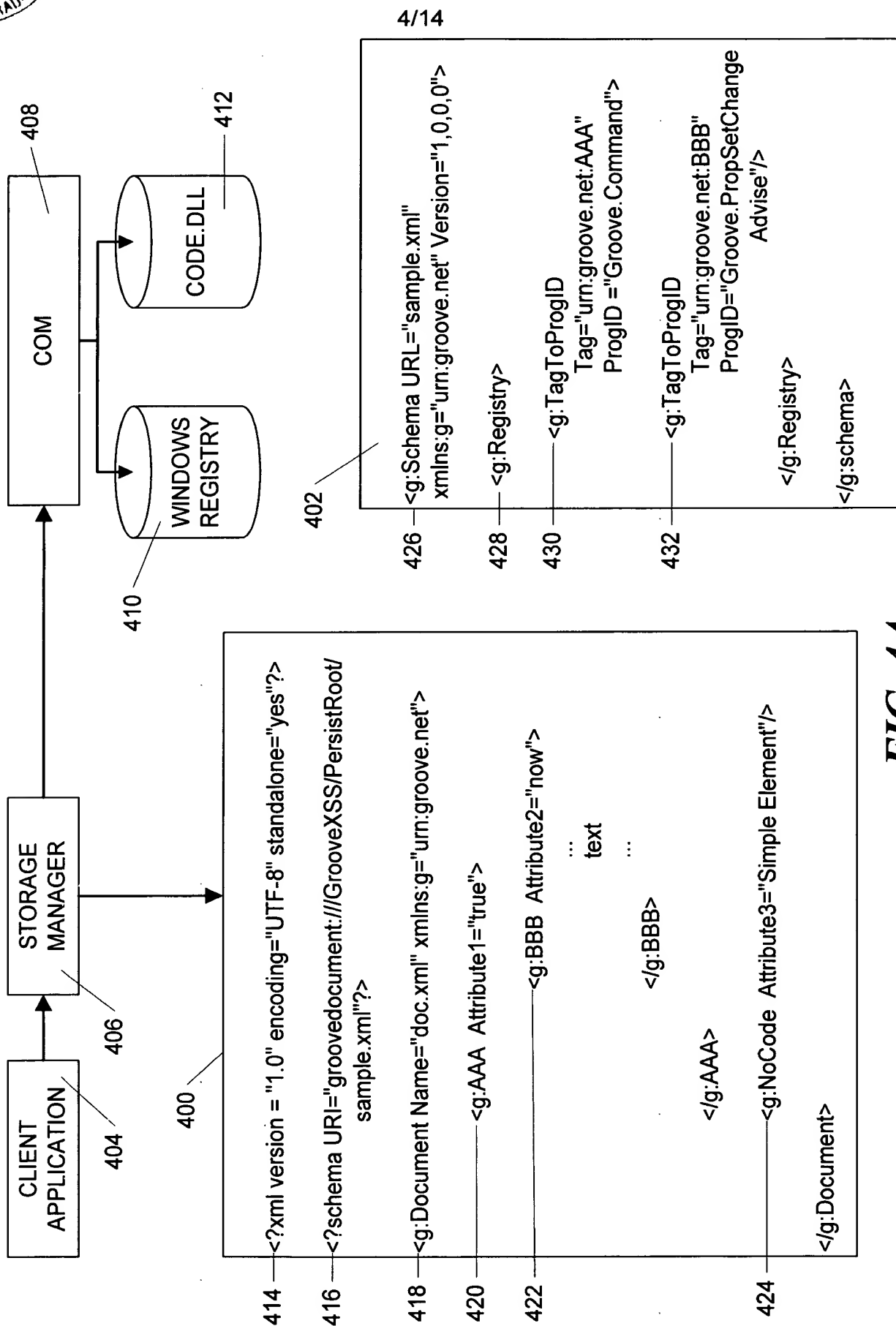
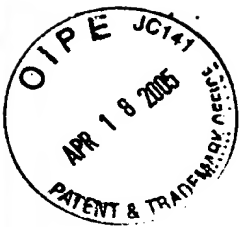


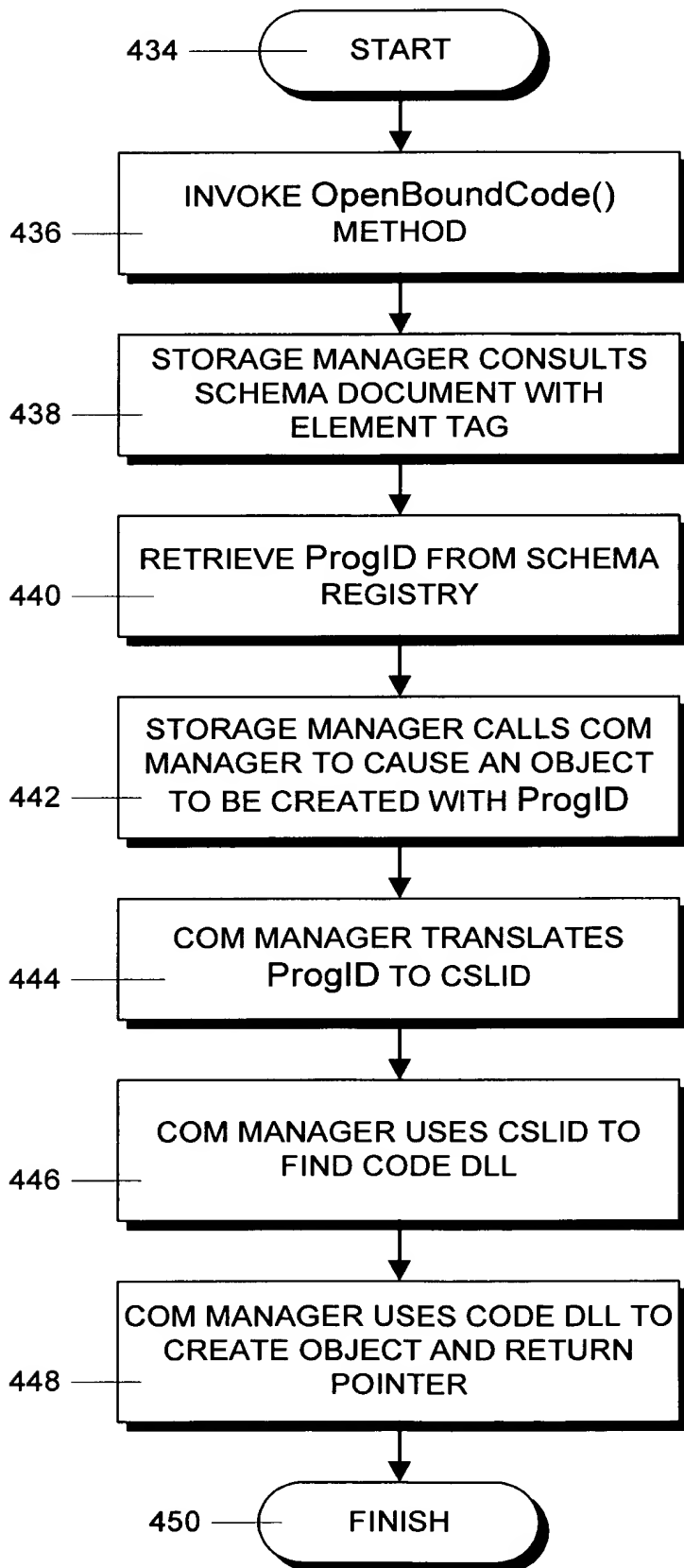
FIG. 4A



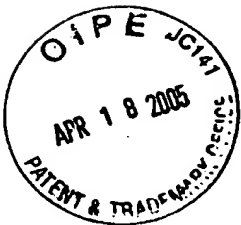
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**FIG. 4B**



Title: METHOD AND APPARATUS FOR EFFICIENT MANAGEMENT OF XML ...  
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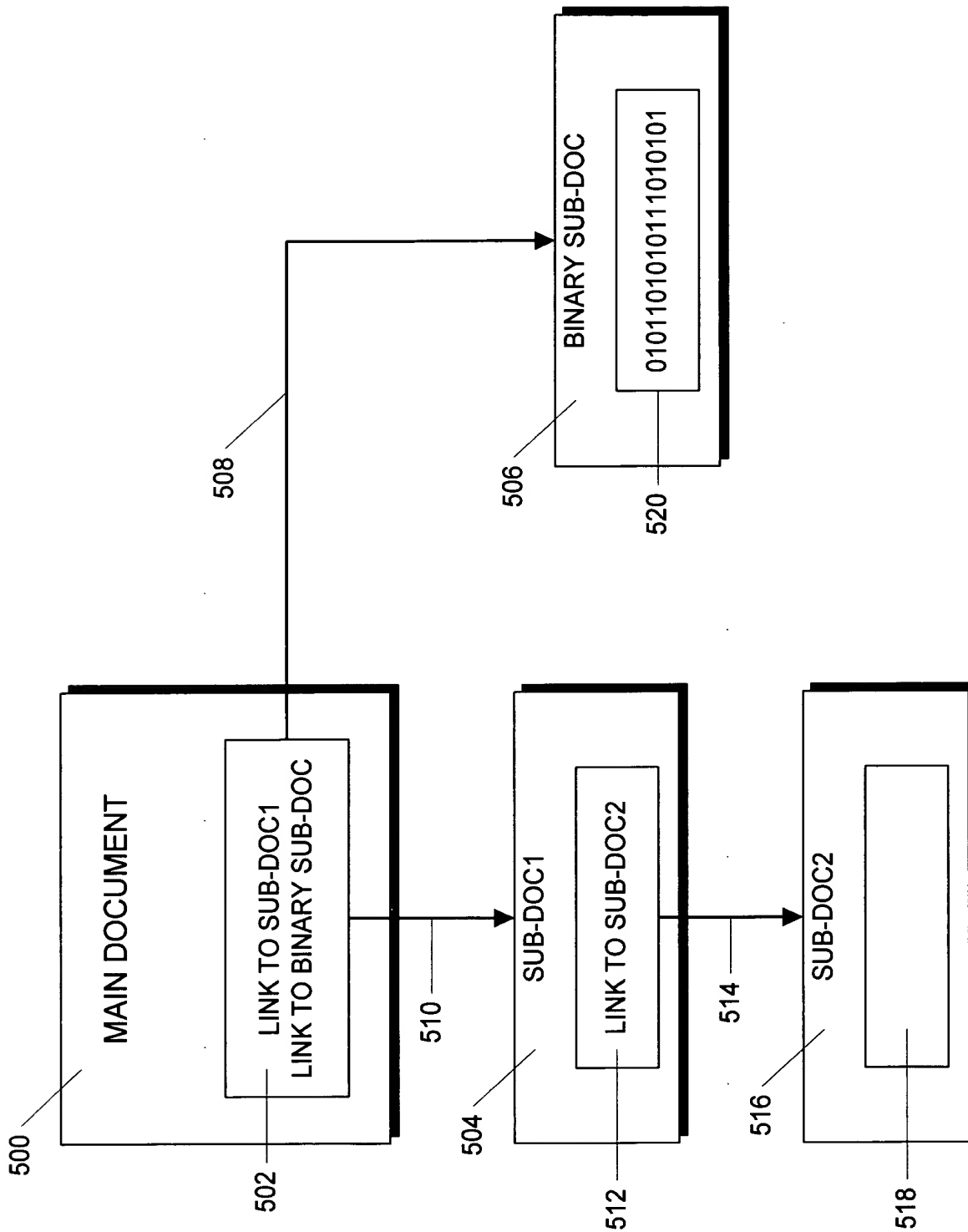


FIG. 5



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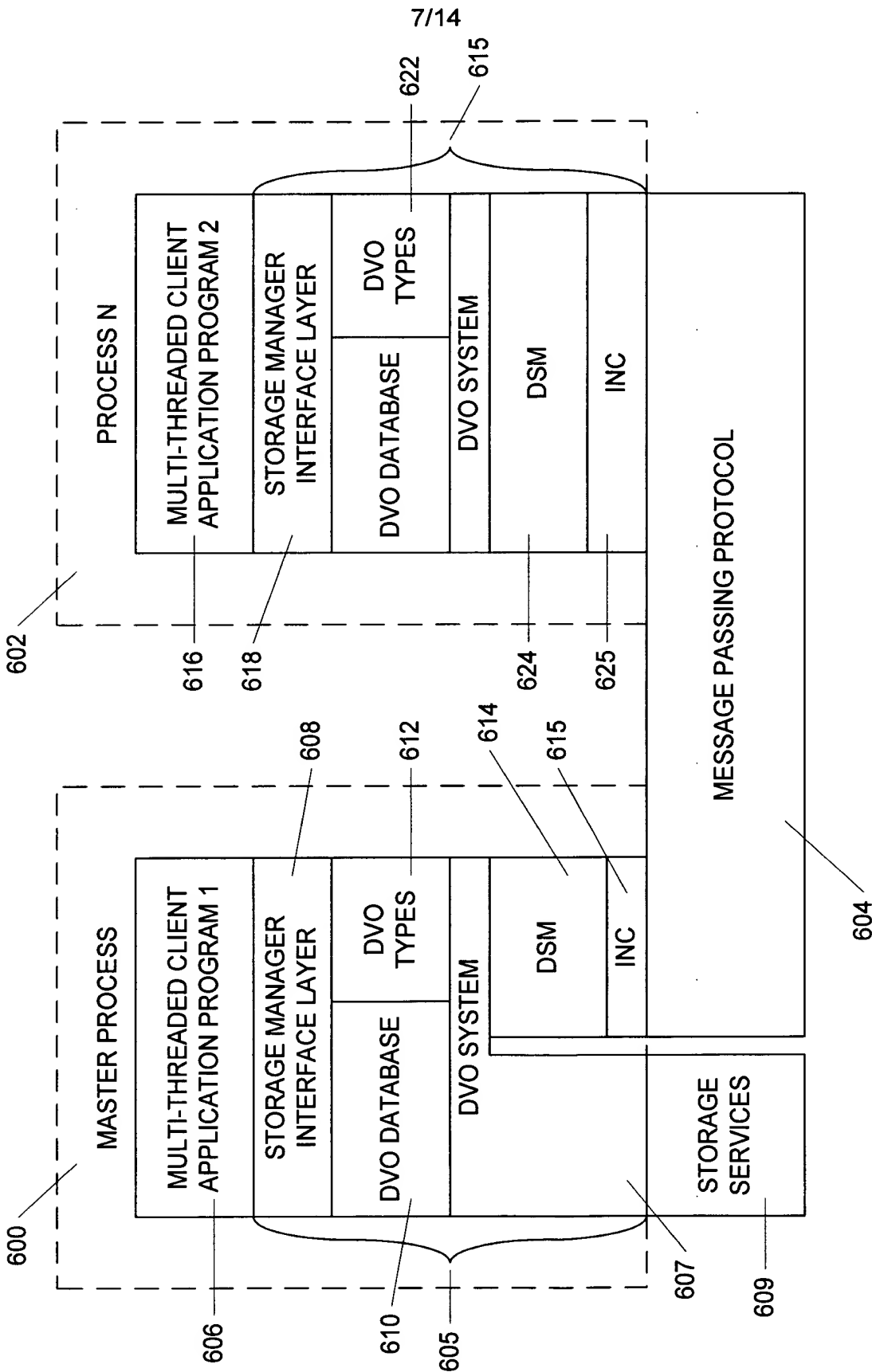
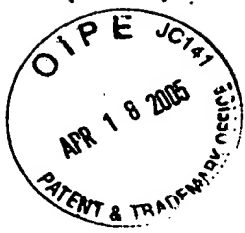


FIG. 6



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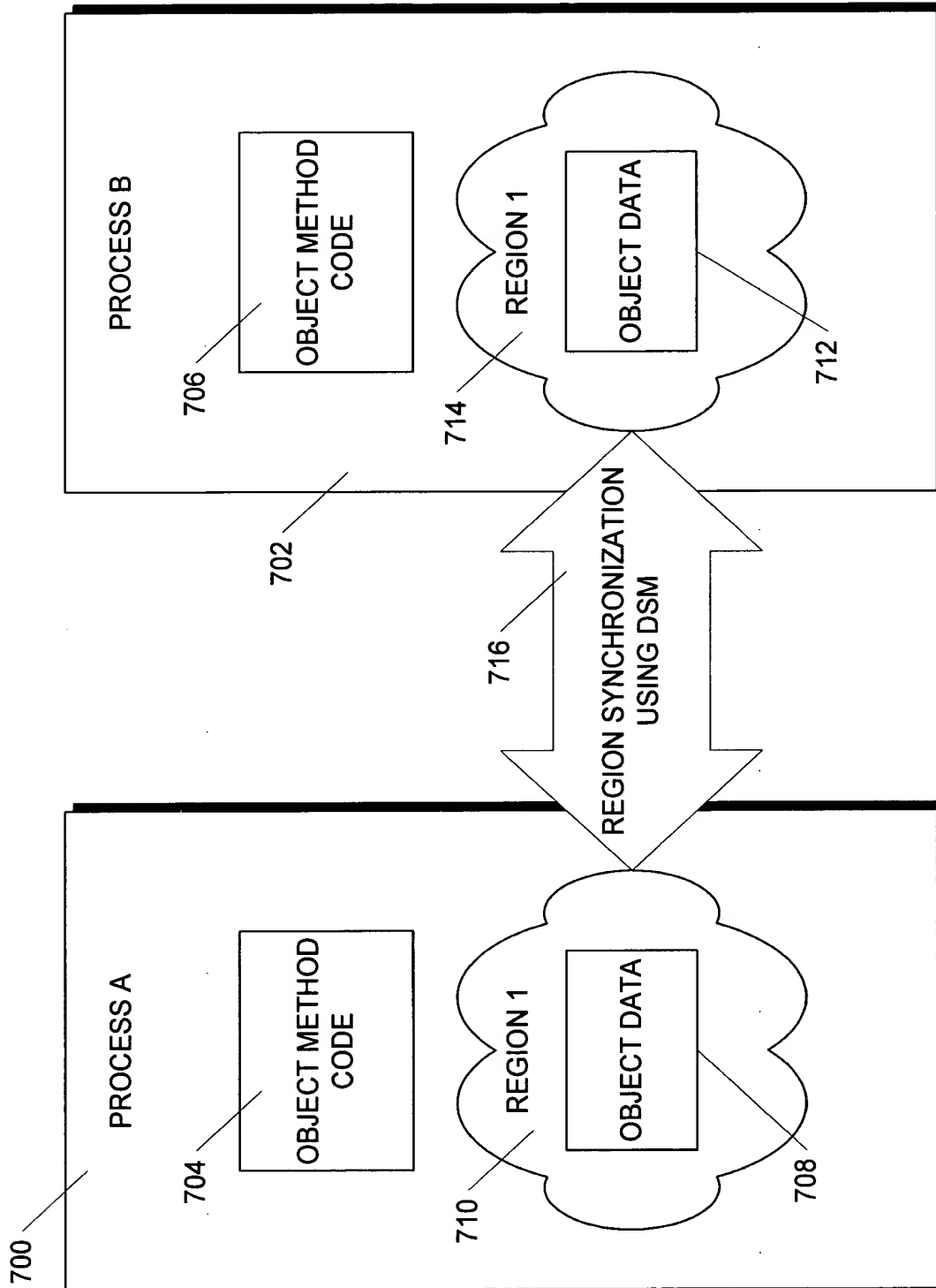


FIG. 7



Title: METHOD AND APPARATUS FOR EFFICIENT MANAGEMENT OF XML ...  
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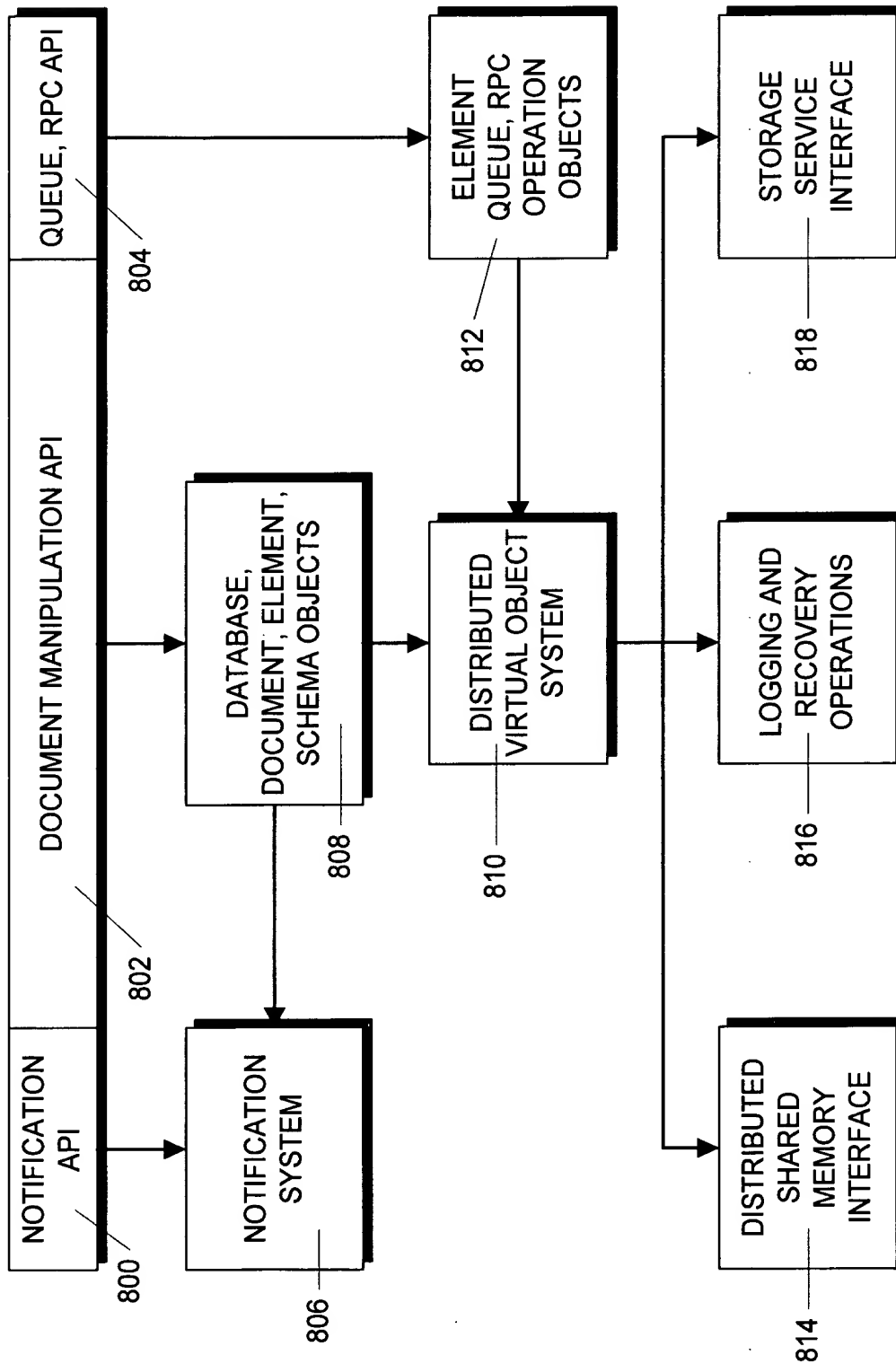
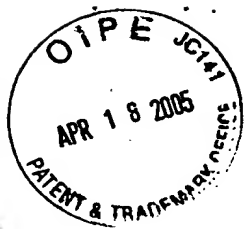


FIG. 8



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900

IGrooveStorageManager

902

IGrooveStorageURISyntax

**FIG. 9**

1000

IGrooveLinkCallback

1002

IGrooveElementRPCServerCallback

**FIG. 10**

1100

IGrooveDatabase

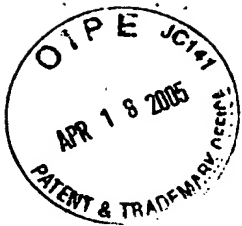
1102

IGrooveCrossProcessSemaphore

1104

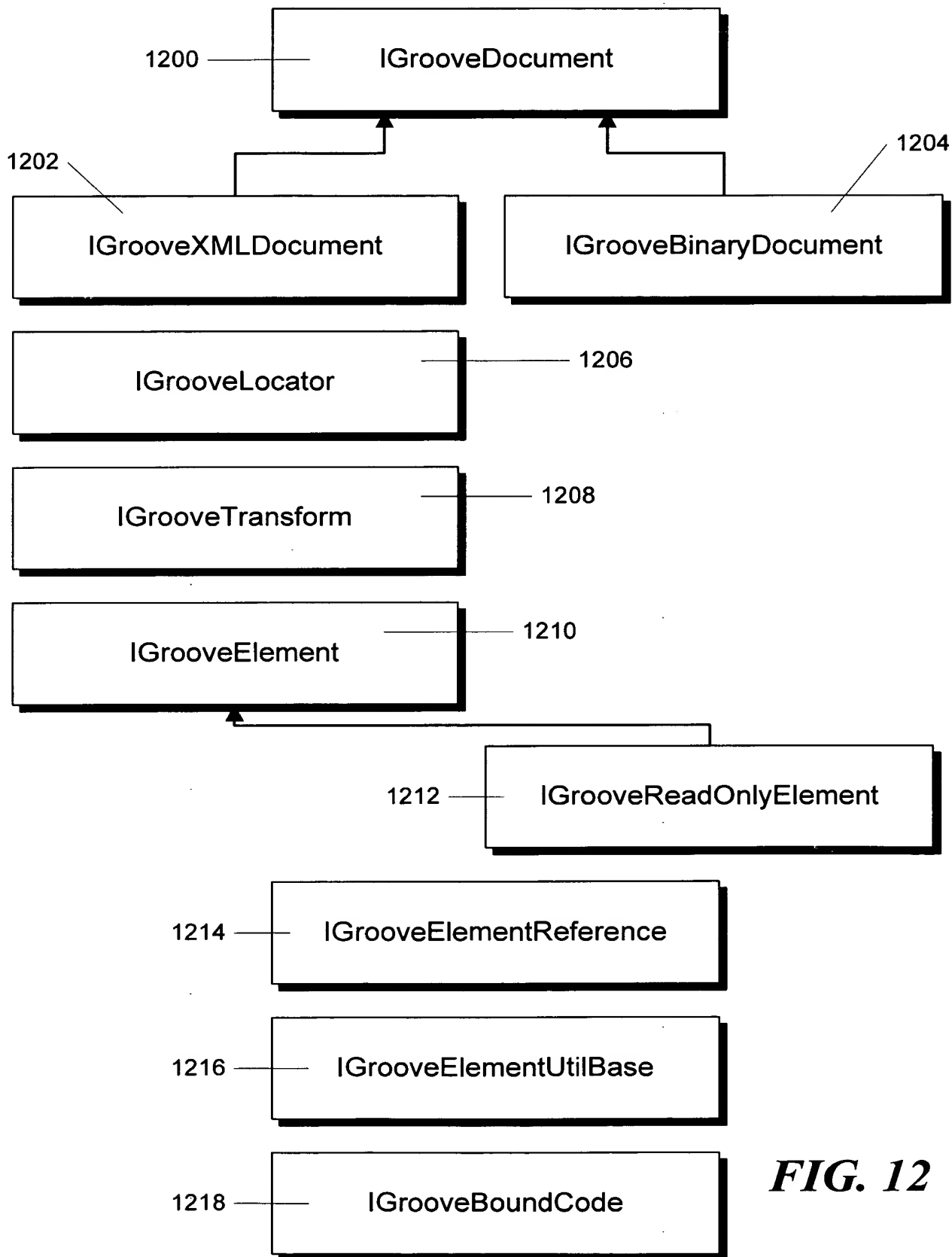
IGrooveTransaction

**FIG. 11**



Title: METHOD AND APPARATUS FOR EFFICIENT MANAGEMENT OF XML ...  
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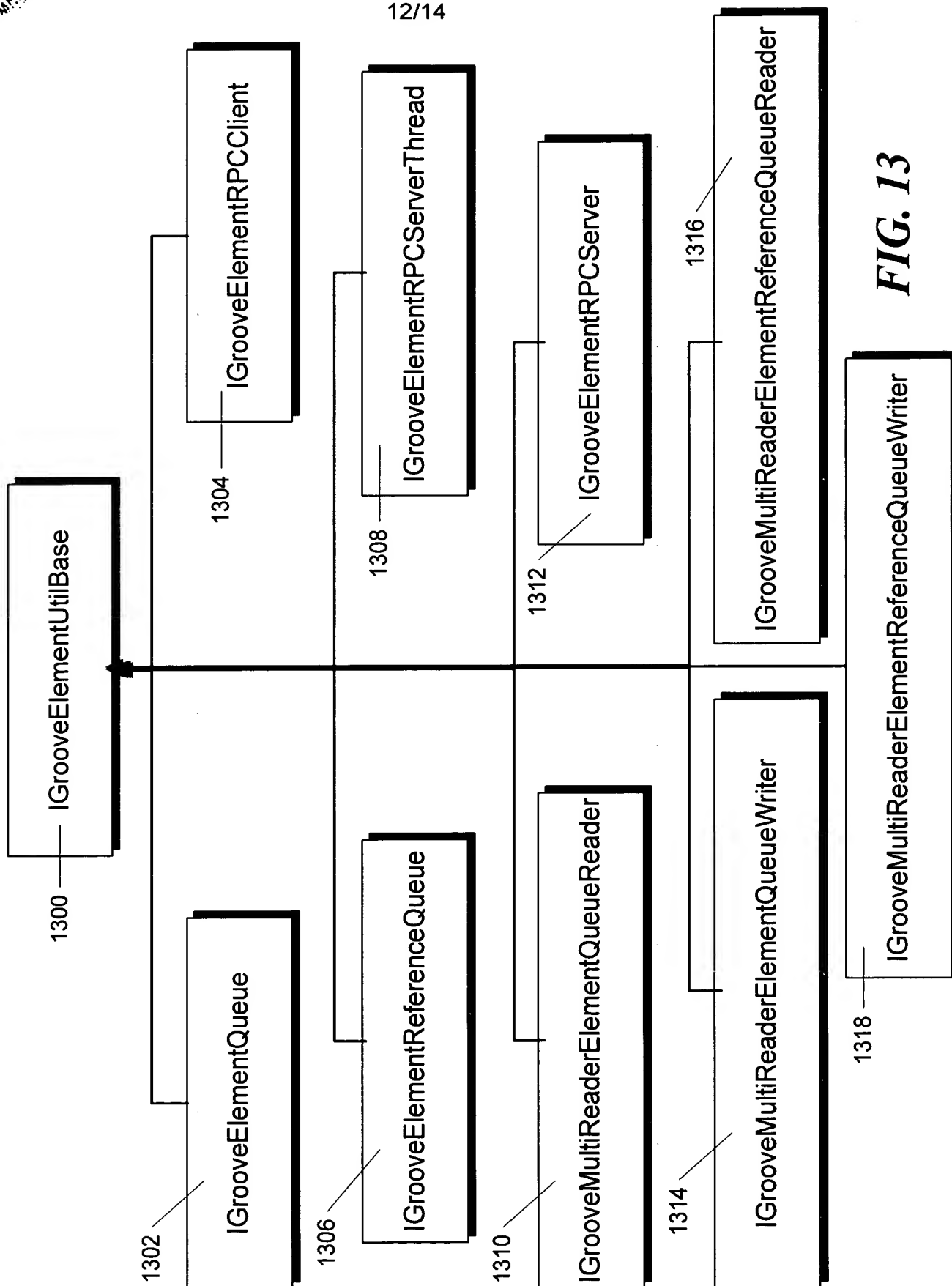
**FIG. 12**



Title: METHOD AND APPARATUS FOR EFFICIENT MANAGEMENT OF XML ...  
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**FIG. 13**

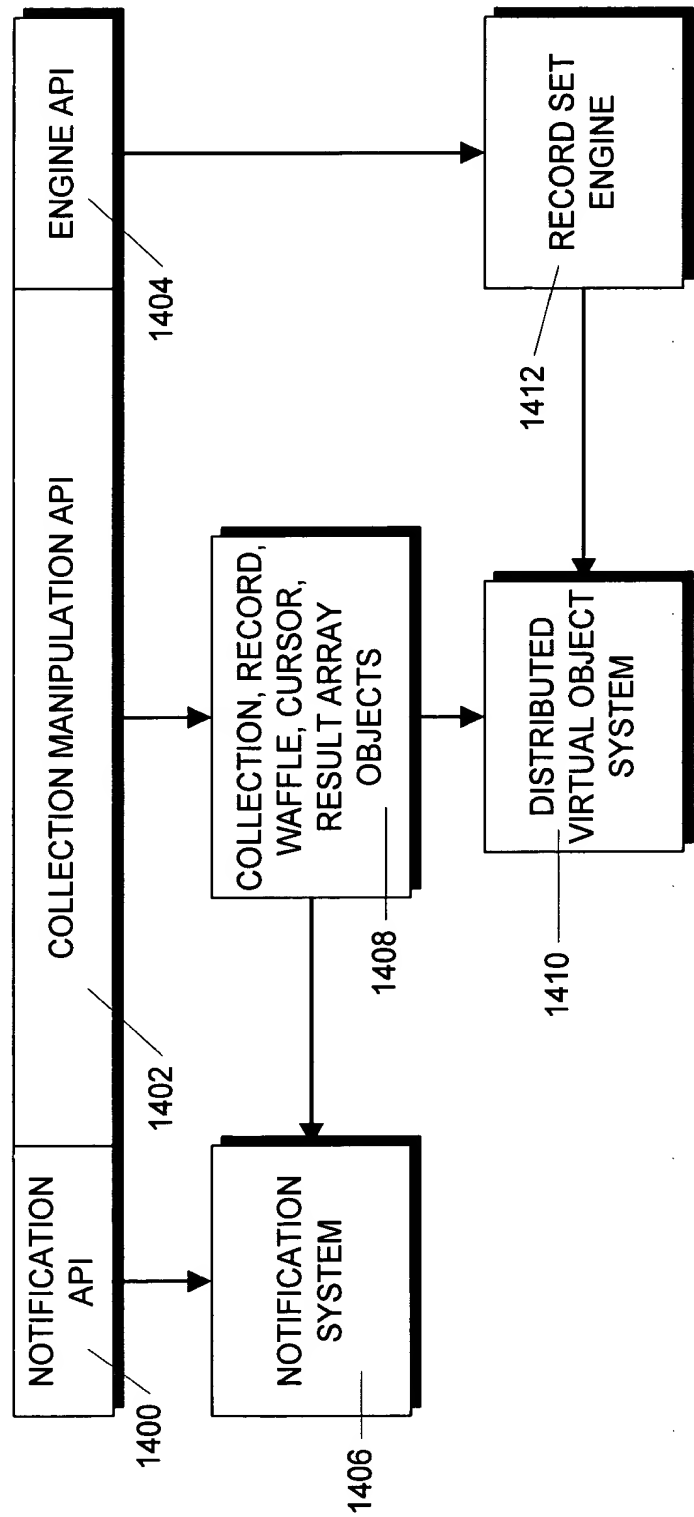
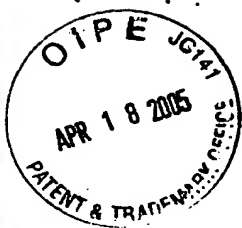


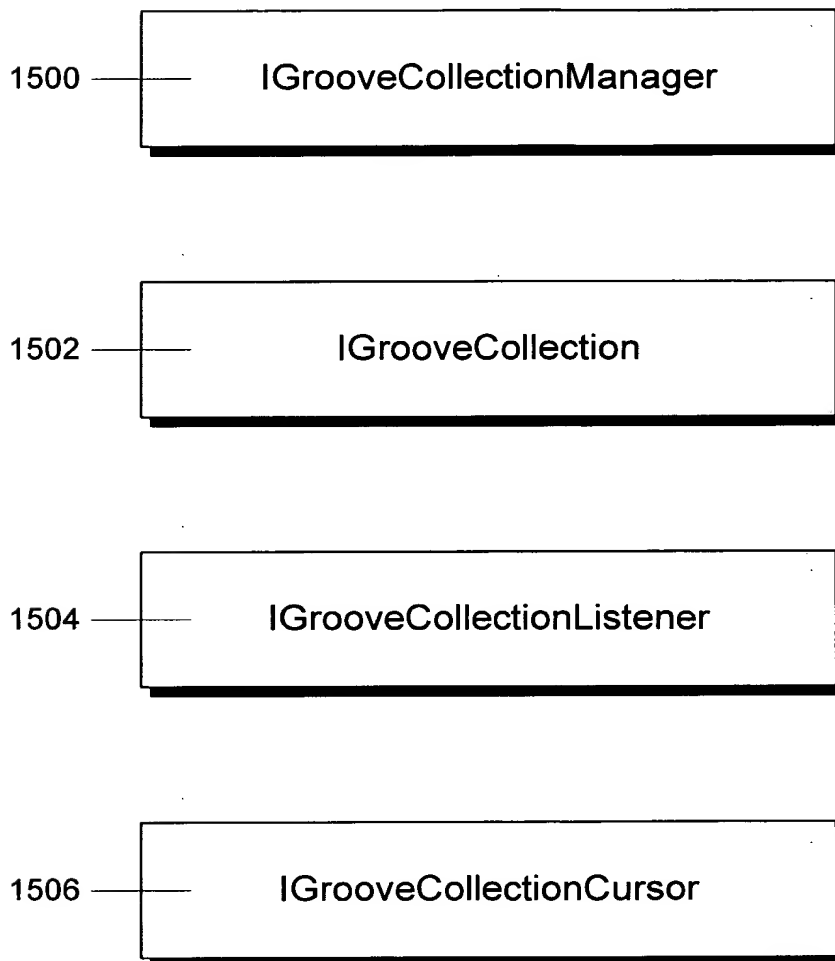
FIG. 14



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***FIG. 15***